

# ZLP Electronics

## Setting up the DigiMaster ProPlus and ProTwo for use with HRD's DM780 DATA mode software.

There are several ways in which you can setup HRD and DM780 to operate.

Some users go on to describe how they have set up their radio, pc, and software and this is fine, except that the methods described will often only apply to their specific radio, for instance, someone describing how they have set up their 756proIII may be useless to someone who has a Kenwood radio.

Not all radios respond the same when PTT is activated by the CAT interface.

If you activate PTT via the CAT interface when using a Kenwood radio, the Kenwood would open the microphone for input and NOT the Acc socket for DATA – result, the method described by someone using a 756proIII radio may not work with a different radio. This method may work on an Icom radio as an Icom radio will open the microphone and the Acc socket (if using the 8 or 13 pin Acc socket – but will not open any 6 pin DATA socket).

The method described below will activate PTT via the Acc socket, this is the correct way to activate the radios PTT line when using DATA modes and it will always work correctly regardless of the radio you are using.

### Configuring DM780 for PTT.

If HRD or DM780 is already running, close them.

Turn on the interface and use device manager to identify the virtual comports provided by the interface.

If you're unsure how to do this, see the [guide to using "device manager"](#).

You can also Download and run the DigiMaster test program which will also identify the ports assigned.

Only proceed when you have identified your virtual comports.

In the following example, the DigiMaster PRO and Windows provided comports 3 and 4.

BUT, these comports in the following example are numbered automatically by Windows, It is most likely that Windows will assign your ports different comport numbers.

If you wish to change the comport numbers you can do if you know what you are doing. "guide to using device manager".

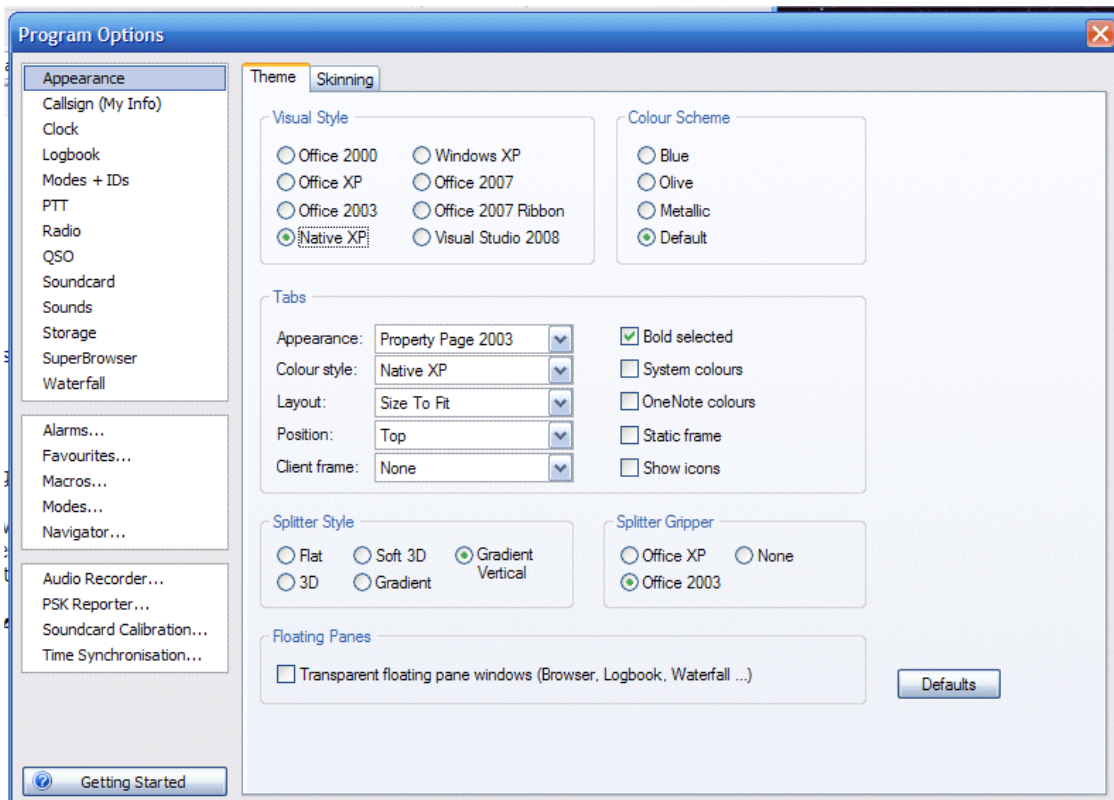
If you are not PC literate then do not change them. Further info on renumbering comports is provided in the guide to using device manager.

Now start HRD, since we are configuring DM780 and not HRD you need to close HRD's CAT connection window.

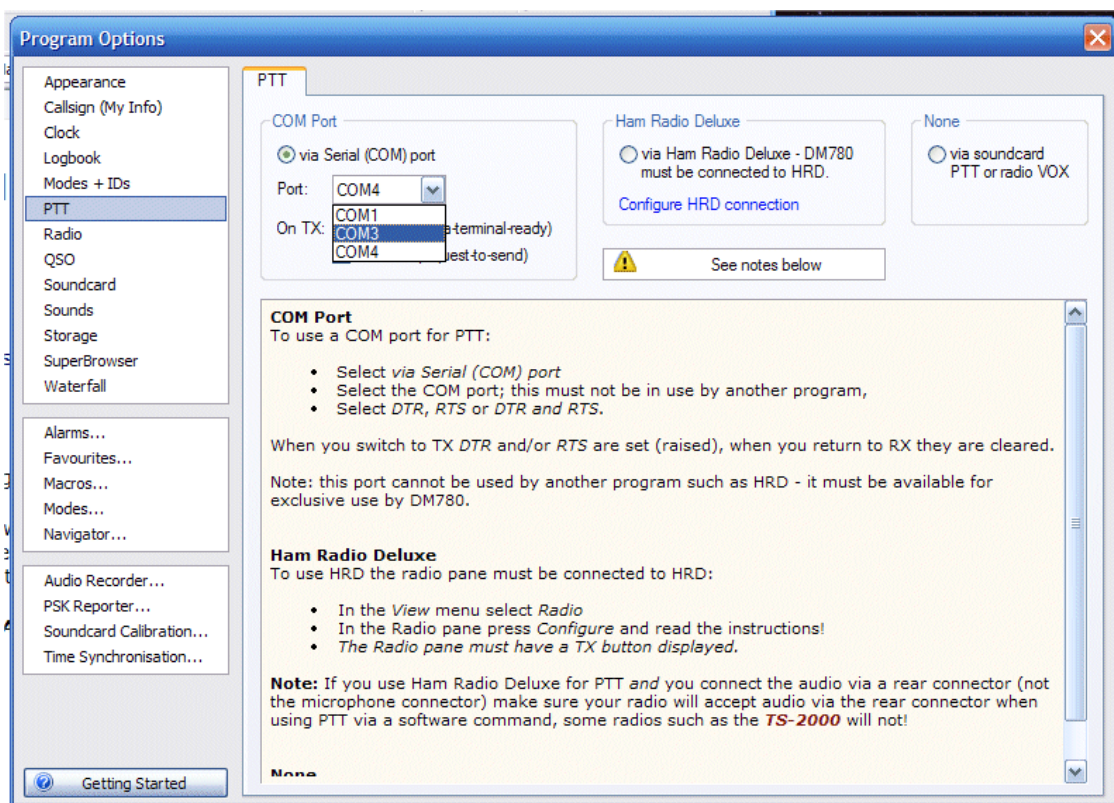
Then from HRD's menu bar click on DM780.

When the program opens, press the "F8" key to get to the configuration settings / program options window.

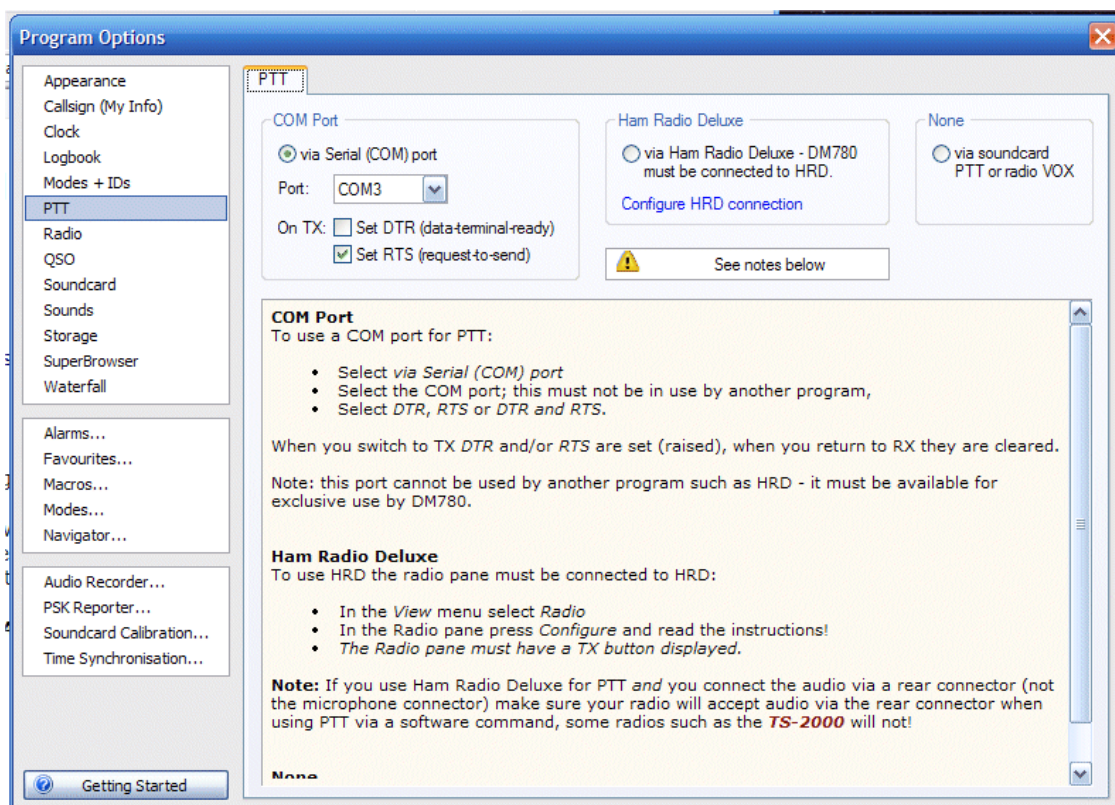
The following window will open;-



From the options on the left hand side, select PTT..  
The window will change to:-



If you do not see the new virtual comports then you have not followed the instructions above in the correct order, so start again.  
 Select "via Serial (COM) port, then select (from the drop down list) the lowest of the two new virtual comports provided by the DigiMaster PRO and windows.  
 Then click the "RTS" button.



You have now correctly configured DM780 to key your radio for DATA transmission.

Note:

Depending upon your radio, you may need to be in a specific data mode, FT857 for example need to be in "DIG" mode.

You may also need to refer to specific instructions regarding the DATA cable you are using.

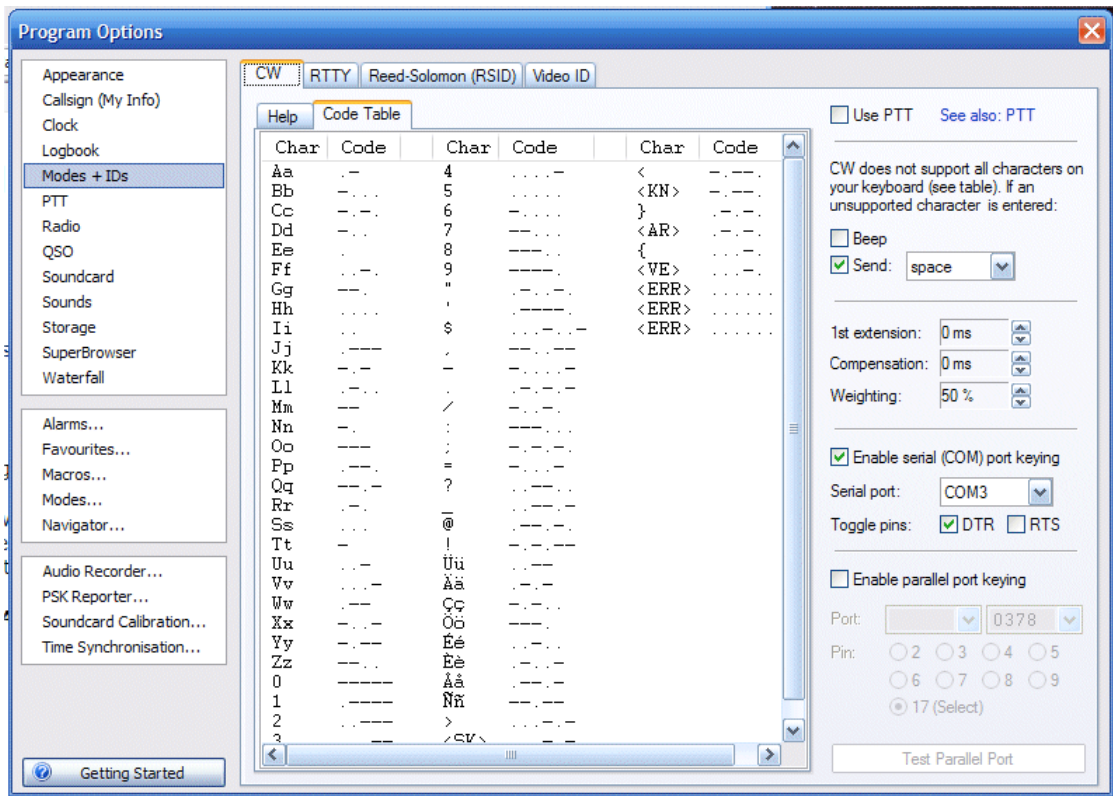
If you are using a "UN01" data lead for example, you should also check that your radios packet DATA speed has been previously set to 1200.

If you're using a "YL02A" cable there are specific instructions in how to set up your radio to operate DATA modes via the YL02A cable.

The method described above is the correct and foolproof method. If you select to activate PTT via "Ham Radio Deluxe" and configure a "connection" to Ham Radio Deluxe, the PTT will activate but your DATA transmission may not operate correctly. Not all radios will transmit DATA when PTT is activated via the CAT system. You may or may not have success using that option but you should be fully aware of your radios CAT capability. Most users are not.

### To configure DM780 for sending CW via the DigiMaster PRO.

While the configuration / program option window is open, select "Modes +IDs".  
 The following window will open;- (Select CW from the tabs).



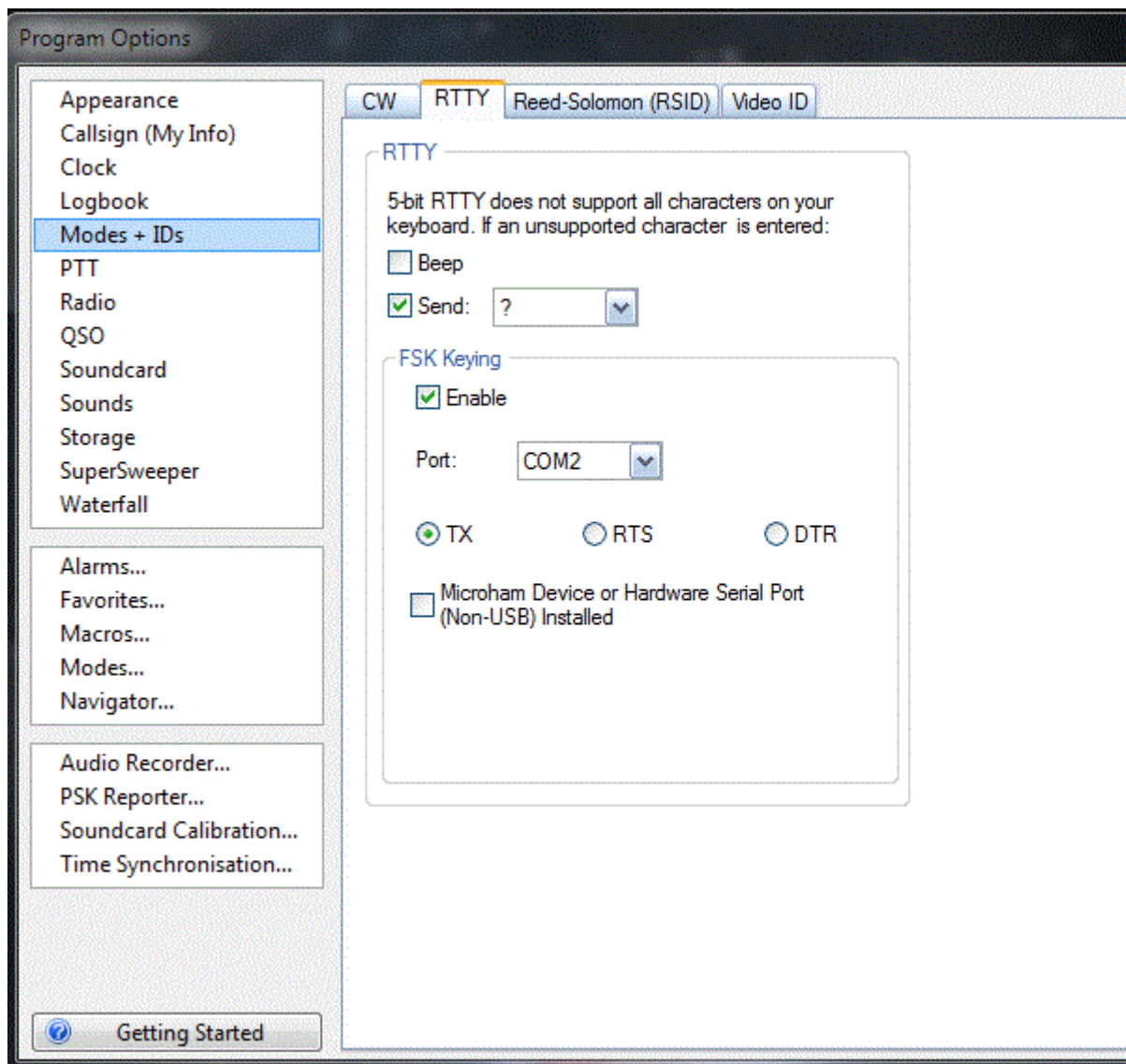
On the right hand side, select Enable serial (COM) port keying.  
 Select the same serial port as you selected for PTT.  
 Select DTR for "Toggle pins".

You should also ensure that your radios CW menu has been set to use a standard CW key.

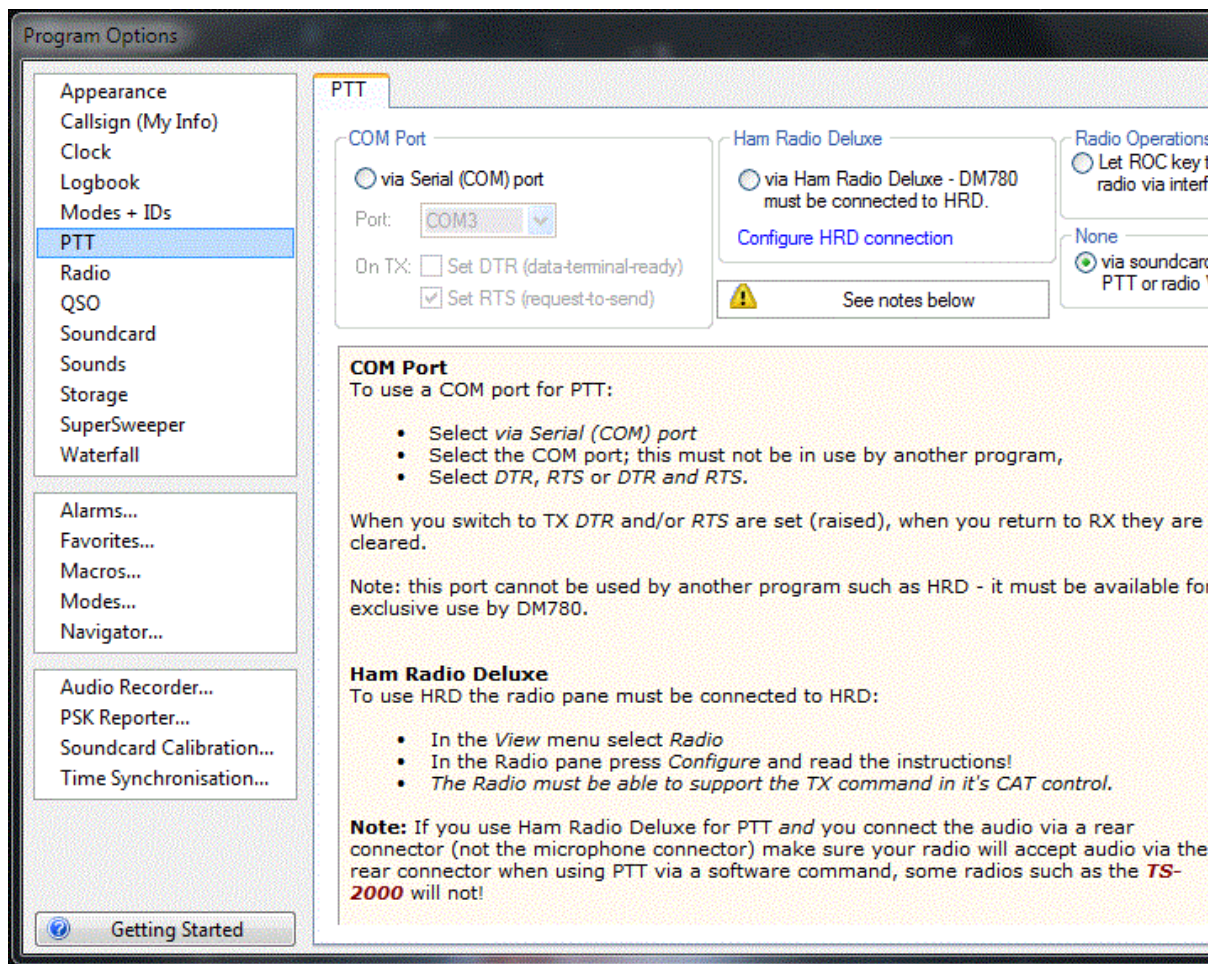
You have now correctly configured DM780 to send CW via the DigiMaster PRO.

**To configure the software to operate FSK with HRD's DM780.**

While the configuration / program option window is open, select "Modes +IDs" and select "RTTY" tab.  
 In the example shown below the PTT / CW / FSK port is on COM2.  
 You should enable and select the port that Windows has assigned to PTT / CW / FSK on your PC.  
 Then select the signal line "TX" (this will be used for switching the FSK signal – HRD will automatically activate the RTS line to provide the needed PTT when operating FSK).

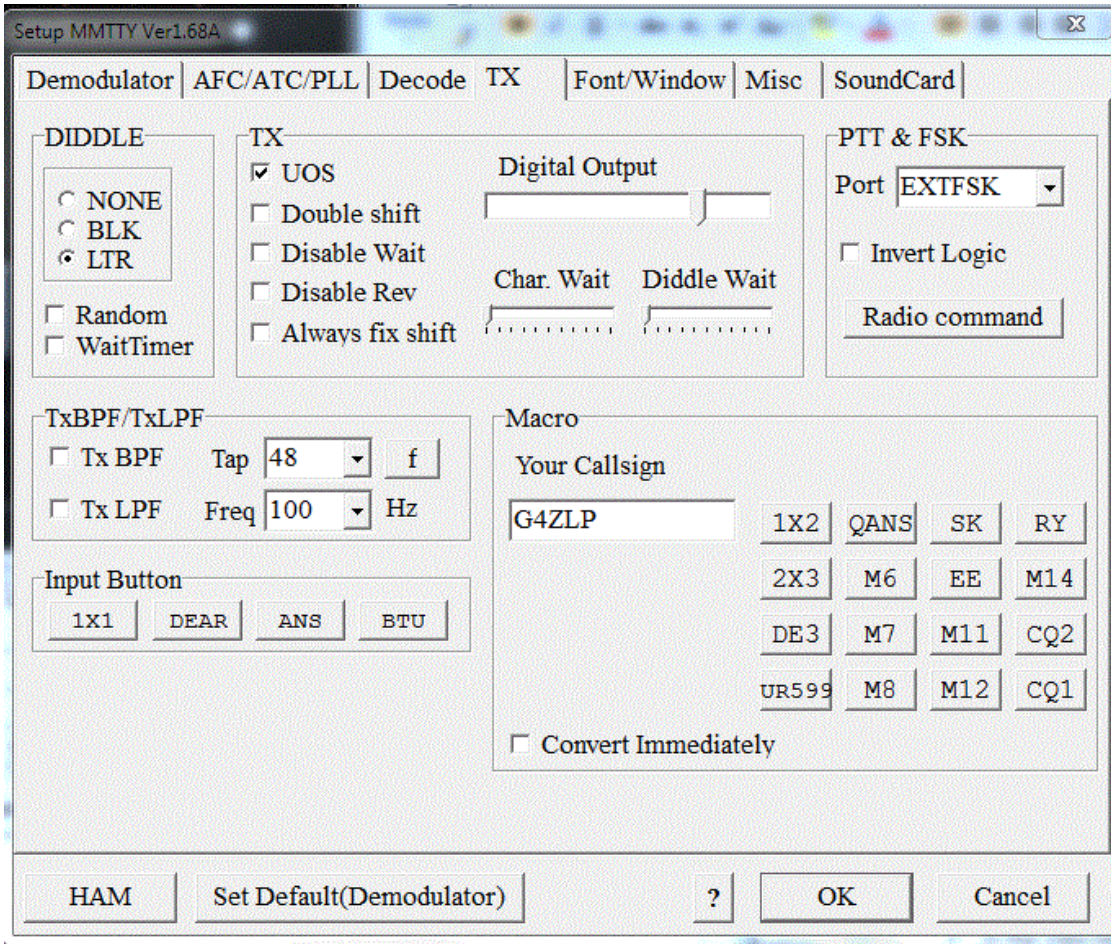


You then need to select "PTT" and disable the "PTT" line as this will cause a conflict in HRD. Disable the serial comport PTT and select "None" – or via soundcard. Note that when you have finished using FSK you should re-enable the PTT. It is important that you close and restart the software (DM780) to close all ports that HRD has been previously using before using the new settings.

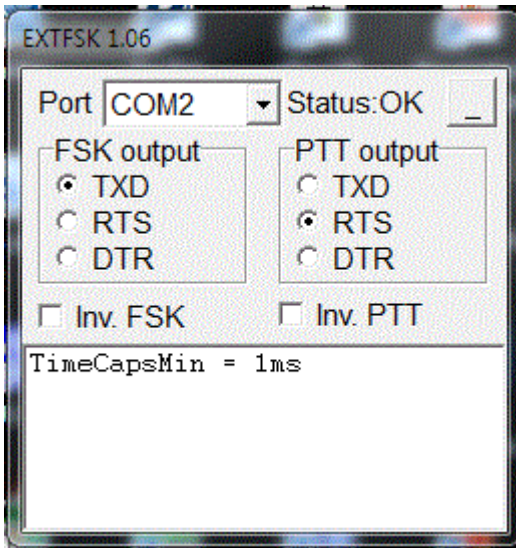


### To configure the software to operate FSK with MMTTY+EXTFSK.

- Install MMTTY then download EXTFSK.
- Put the EXTFSK dll file into the MMTTY directory.
- Run MMTTY...
- In MMTTY's menu, "Options" – select "Setup MMTTY"
- Select the "TX" tab and you will see the list of available ports.
- Scroll down it and select EXTFSK.



When you select the EXTFSK the EXTFSK window will open.



Select the PTT port (in this example COM2)  
 Select TXD for FSK output.  
 Select RTS for PTT output.

Close the window and use MMTTY in true FSK mode.

